

Speaker Baffles

6A328, 6A338, 6A342B, 6A530B,
6A603, 6A625A, 6A630, 6A633,
6A634, 6A635, 6A636, 6A650
and 6L100



Flush Speaker Baffles 6A342B

Overview

Dukane Speaker Baffles and Baffle Assemblies are ideally suited for use in classrooms, lobbies, stores, restaurants, and other commercial and educational establishments. Flush mount models available with white or brushed aluminum finish.

Standard Features

6A328 Square Speaker Baffle

- Wall mount or Ceiling mount
- Sturdy Steel
- Finished folded edges
- No speaker screws visible

6A338 Flush Speaker Baffle

- Molded of high impact styrene
- No speaker screws visible
- Will not chip or mar
- Ceiling or wall mounting

6A342B, 6A625A Flush Speaker Baffle

- Steel construction
- Simple lines that blend with modern interiors
- Epoxy finish will not chip or mar (6A342B)
- No speaker screws visible (6A625A)

6A633, 6A634, 6A630, 6A635, 6A636 Speaker Baffle Assembly

- Speaker-matching transformer for either 25-Volt or 70-Volt line
- Reduced installation time and cost through pre-assembly
- High impact styrene baffle (6A630, 6A635, 6A636)
- Volume control (6A635 - recessed; 6A636 - exposed)

6A650 Speaker Baffle Assembly

- 25 and 70-Volt line operation
- Brushed aluminum or white steel speaker baffle
- Low mounting profile
- Additional whizzer cone for extended frequency response

6A530B, 6A603 Sound Masking Speaker Assembly

- Excellent low frequency response and reflection patterns
- Flame retardant cones
- Defined rectangular sound pattern
- Dual voltage transformer with variable power taps

6L100 Special Purpose Baffle

- Bi-Directional Radiation
- Ideal Corridor Baffle
- Sturdy Construction

Description

6A328, 6A338, 6A342B, 6A625A Flush Speaker Baffles

These models are ideally suited where flush speakers are required in classrooms, lobbies, stores, restaurants, and other commercial and educational establishments.

6A633, 6A634 and 6A630 Speaker Baffle Assemblies

These units consist of a Model 5A606 loudspeaker with 25 Volt or 7Volt Speaker Line transformer. These assemblies are especially well suited for use in the classroom, small meeting rooms and other areas. Mounting hardware is furnished, and preassembly reduces time and expense.

6A650 Speaker Baffle Assembly

The Dukane Model 6A650 is a high quality speaker, transformer, and speaker baffle assembly. The loudspeaker has an additional speaker cone for extended high frequency response. The speaker baffle, constructed of steel, has simple, tasteful lines that blend well with all modern interiors. The assembly includes a dual voltage 70- and 25-volt matching transformer. The transformer has taps of 1/2, 1, 2, and 4 watts at 70 volts, and 1/2, 1, and 2 watts at 25 volts. Quality reproduction provides for use in many installations.

6A635, 6A636 Speaker Baffle Assembly With Volume Control

The Dukane Model 6A635 and 6A636 Speaker Baffle Assemblies with Volume Control each provide a complete speaker baffle assembly with a self-contained control for individual speaker volume adjustment. This assembly, with a speaker providing a low level, wide frequency range, is ideal for music and/or paging systems in offices or other applications where individual, variable volume levels are required. Model 6A635, the volume control is recessed, screwdriver adjustable to discourage unauthorized adjustment. Model 6A636, the volume control is exposed for convenient adjustment. A complete speaker baffle assembly means the assembly includes a transformer compatible with either 25V or 70V speaker lines. The baffle finish will accept any good latex paint to

match the mounting surface where required. The preassembly of speaker, baffle, and transformer reduces installation time and cost.

6A603 Sound Masking Speaker

The Dukane Model 6A603 Sound Masking Speaker is scientifically designed for sound masking applications in shallow depth or limited plenum areas. Dual 5-inch (12.7 cm) high efficiency speakers are mounted on a folded aluminum baffle designed to maximize low frequency response from a minimum height installation dimension. Unlike most contemporary assemblies, the 6A603 is not hampered by "hot spots" directly below the speaker units, since its innovative design employs the bottom surface of the baffle as a highly effective acoustic shield. This assembly is designed for use in areas where the plenum area height is 36 inches (91.4 cm) or less. If the plenum area exceeds this height, Dukane Sound Masking Speaker Assembly Model 6A530B should be used.

6A530B Sound Masking Speaker

The Dukane Model 6A530B Background Sound Masking Speaker Assembly is specially designed and built for background sound masking systems. Two eight inch (20.3 cm) flame retardant speakers are mounted in an 0.8 cubic foot prismshaped enclosure which is constructed of 20 gauge steel. The 25 or 70.7 volt input is fed to an impedance matching transformer.

The bi-directional configuration of the speakers and prism shape of the enclosure provide for the most effective angular dispersion of the masking sound. This unit is designed for high plenum areas in excess of 36 inches (.91 m). If the plenum height is 36 inches (.91 m) or less, Dukane Sound Masking Speaker Assembly Models 6A603 should be used. Dukane Model 6A530B is covered by U.S. Patent Number 3,985,987, "Sound Masking System for Open Plan Office." Wiring of the assembly can be altered for out-of-phase operation to provide an area of reduced sound pressure directly below the unit. In this mode of operation, the sound pressure level on the null will be at least 15 dB down from the on-axis pressure. (See chart that follows.)

Engineers' Specification

Flush Speaker Baffles

6A338

The Flush (wall, ceiling) Speaker Baffle shall be Dukane Model 6A338 or approved equal. The baffle shall measure 12-5/8 inches (32.1 cm) in diameter, and the circular design shall match the surrounding motif. It shall be solid white, molded, high impact styrene, highly resistant to scratches and mars. The baffle finish shall accept any good latex paint to match the mounting surface where required. It shall mount an 8-inch (20.3 cm) loudspeaker with concealed screws and provide a 60 percent opening for the sound. Four holes in the baffle shall allow mounting on an Dukane Backbox. The baffle weight shall be 7.5 ounces (210 g).



6A342B

The Flush Speaker Baffle shall be Dukane Model 6A342B or approved equal. The baffle shall be 12-7/8 inches (32.7 cm) in diameter, and the circular design shall match the surrounding motif. It shall be constructed of 22 gauge, cold-rolled steel, embossed with "Dukane," and finished in solid white. The surface shall be coated with a baked on powdered epoxy that is highly resistant to scratches and other surface blemishes. It shall be predrilled to accept an 8-inch (20.3 cm) loudspeaker and mount on an Dukane Backbox. The baffle weight shall not exceed 20 ounces (560 g).



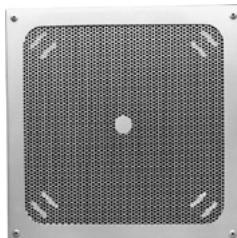
6A625A

The Flush Speaker Baffle shall be Dukane Model 6A625A or approved equal. The baffle shall be 12-3/4 inches (32.4 cm) in diameter, and the circular design shall match the surrounding motif. It shall be constructed of 22 gauge, cold-rolled steel, embossed with "Dukane," and finished with a baked on white powdered epoxy. It shall mount on an 8-inch (20.3 cm) loudspeaker with concealed screws and provide a 60 percent opening for the sound. Four holes shall allow mounting on an Dukane Backbox. The baffle weight shall be 13 ounces (364 g).



6A328

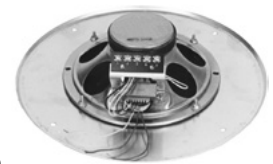
The (wall, ceiling) Flush Speaker Baffle shall be Dukane Model 6A328 or approved equal. The baffle shall be constructed of steel and finished in flat white paint. The 8-inch (20.3 cm) loudspeaker shall be mounted on a separate steel plate to conceal the mounting screws. The speaker mounting plate and the baffle shall be predrilled to mount on an Dukane Backbox. The baffle shall be 12-1/2 inches (31.8 cm) square, 3/16 inch (0.5 cm) deep, and weigh not more than 2-1/4 pounds (1 kg).



Speaker Baffle Assemblies

6A650

The speaker baffle assembly shall be Dukane Model 6A650 and shall be furnished and installed as indicated on the plans. The loudspeaker shall be an 8-inch (20.3 cm) seamless cone type, with an additional cone mounted in the apex of the large cone to extend the high frequency response. The frequency range shall be from 30 to 20,000Hz. The normal wattage rating shall be 15 watts with a program power rating of 25 watts. The voice coil shall be 1 inch (2.5 cm) in diameter with an 8-ohm impedance. The ceramic magnet shall weigh at least 10 ounces (283 g). The axial sensitivity shall be 95dB. The assembly shall include a speaker baffle constructed of cold-rolled steel with white epoxy finish, and embossed with "Dukane." The assembly shall also include a universal matching transformer suitable for use on a 25-volt line with taps at 1/2, 1, and 2 watts or a 70-volt line with taps at 1/2, 1, 2, and 4 watts. The diameter of the assembly shall be 12-7/8 inches (32.7 cm) and shall not exceed 3 inches (7.6 cm) in depth. The net weight of the assembly shall not exceed 2 pounds, 12 ounces (1.2 kg).



6A630

The speaker baffle assembly shall be Dukane Model 6A630. (Insert Model 5A606 Engineers' Specifications here.) The baffle shall be 12-5/8 inches (32.1 cm) in diameter, 1/2 inch (1.3 cm) deep, and the circular design shall match the surrounding motif. It shall be molded of solid white, high impact styrene, highly resistant to scratches and mars. The baffle finish shall accept any good latex paint to match the mounting surface where required. It shall mount the 8-inch (20.3 cm) loudspeaker with concealed screws and provide a 60 percent opening for sound. Four holes in the baffle shall allow it to be mounted on an Dukane backbox. The assembly shall have a net weight of 2 pounds, 11 ounces (1.2 kg).



6A633 Square Speaker Baffle Assembly

The speaker baffle assembly shall be Dukane Model 6A633. (Insert Model 5A606 Engineers' Specifications here.) The baffle shall be 12-1/2 inches (31.8 cm) square, 3/16 inch (0.5 cm) deep. It shall be constructed of steel, finished in flat white paint. The 8-inch (20.3 cm) loudspeaker shall be mounted on a separate steel plate to conceal the mounting screws. Four holes in the baffle shall allow it to be mounted on an Dukane backbox. The assembly shall have a net weight of 4 pounds, 8 ounces (2 kg).

6A634 Speaker Baffle Assembly

The speaker baffle assembly shall be Dukane Model 6A634. (Insert Model 5A606 Engineers' Specifications here.) The baffle shall be 12-7/8 inches (32.7 cm) in diameter, 3/8 inch (1 cm) deep, and the circular design shall match the surrounding motif. It shall be constructed of 22 gauge, cold-rolled steel, coated with a baked-on white powdered epoxy that is highly resistant to scratches and mars. Four holes in the baffle shall allow it to be mounted on an Dukane backbox. The assembly shall have a net weight of 3 pounds, 8 ounces (1.6 kg).

6A635 and 6A636 Speaker Baffle Assembly With Volume Control

The Speaker Baffle Assembly with Volume Control shall be Dukane Model 6A635 or 6A636. The 6A635 assembly shall be equipped with a recessed volume control, adjustable with a small screwdriver through a hole in the baffle. The 6A636 assembly shall be equipped with a volume control adjustable by a white knob on the center, front of the baffle.

The loudspeaker shall be an 8-inch (20.3 cm), eight-ohm, seam-less cone type. The ceramic magnet shall weigh at least 4.8 ounces (134 g). The frequency response shall be 90 to 15,000 Hz. The axial sensitivity shall be 91 dB at 3.3 feet (1 meter) for 1-watt input. The normal wattage rating shall be 8 watts with a program rating of 12 watts.

The voice coil diameter shall be 3/4 inch (1.9 cm). The depth shall be 2-3/4 inches (7 cm). All external parts shall be cadmium plated. The loudspeaker shall be equipped with a universal matching transformer suitable for use on a 25-volt output line with taps at 1/2, 1, or 2 watts or a 70-volt output line with taps at 1/2, 1, 2, or 4 watts.

The baffle shall be 12-5/8 inches (32.1 cm) in diameter, 1/2 inch (1.3 cm) deep, and the circular design shall match the surrounding motif. It shall be molded of solid white, high impact styrene,



highly resistant to scratches and mars. The baffle finish shall accept any good latex paint to match the mounting surface where required. It shall mount the 8-inch (20.3 cm) loudspeaker with concealed screws, and provide a 60 percent opening for the sound. Four holes in the baffle shall allow the assembly to be mounted on an Dukane Backbox. The assembly shall weigh 2 pounds, 12.5 ounces (1.3 kg).

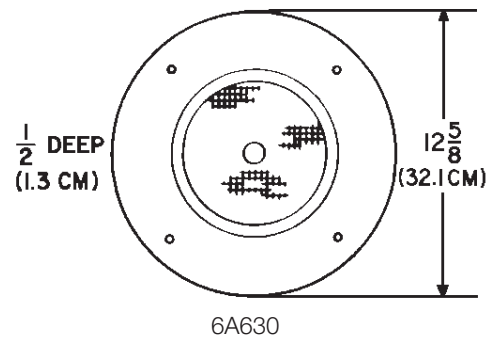
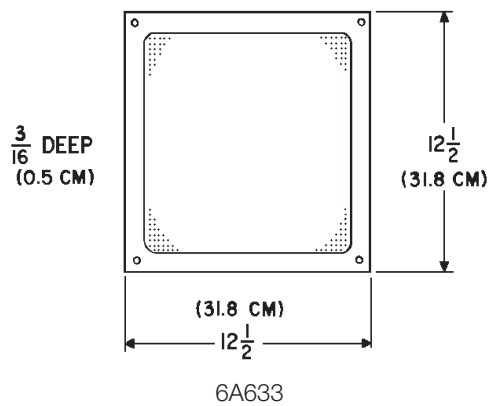
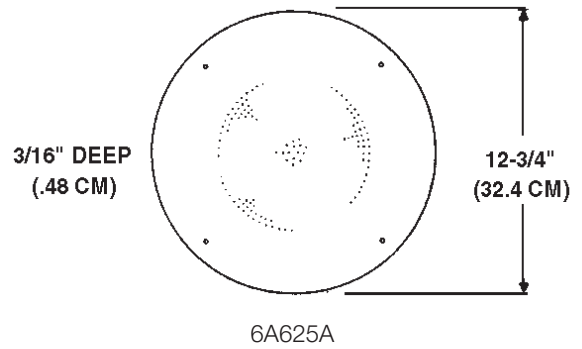
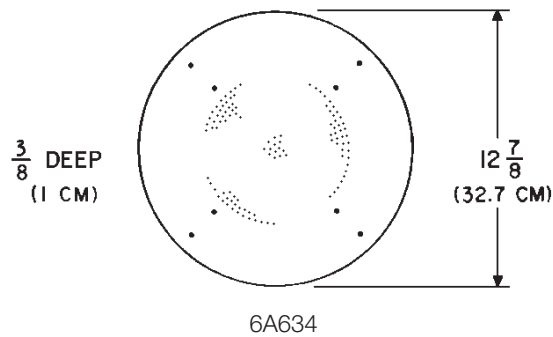
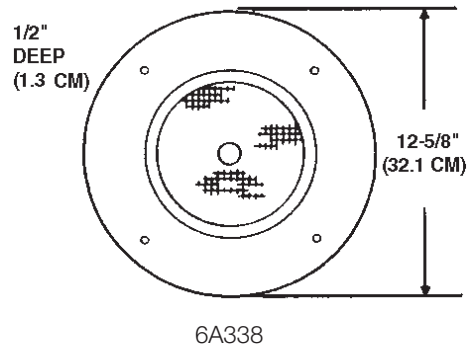
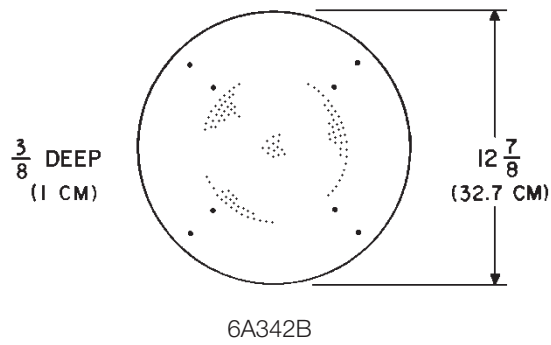
Special Purpose Baffles

6L100

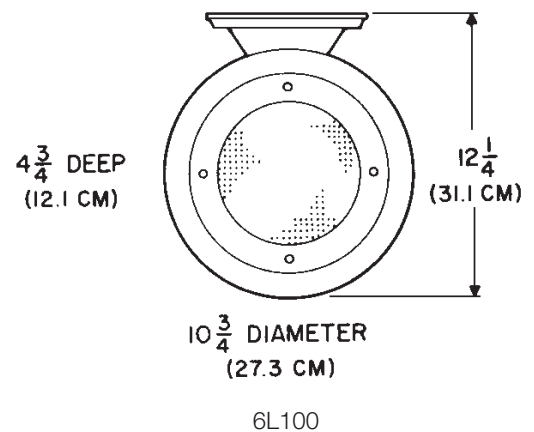
The Corridor Baffle shall be Dukane Model 6L100 or an approved equal. The baffle shall be constructed of reinforced aluminum with a brushed satin finish, and it shall be designed to project sound from an 8-inch (20.3 cm) loudspeaker from both sides of the baffle when mounted on a ceiling or side wall. The baffle shall mount on a standard 4-inch (10.2 cm) by 4-inch (10.2 cm) outlet box, and shall not protrude more than 12-1/4 inches (31.1 cm) from the mounting surface. The unit shall be 10-3/4 inches (27.3 cm) in diameter and 4-3/4 inches (12.1 cm) deep, and shall weigh no more than 2 pounds (900 g).



Dimensions: Flush Speaker Baffles



Dimensions: Special Purpose Baffles



Sound Masking Speakers

6A530B Background Sound Masking Speaker Assembly

The Background Sound Masking Speaker Assembly shall be Dukane Model 6A530B, or an approved equal, furnished and installed as indicated on the plans. The speakers shall be eight inch (20.3 cm), flame retardant, seamless cone type, mounted on a bidirectional configuration for optimum angular dispersion of the sound. The wiring of the speaker shall be capable of providing in-phase or out-of-phase mode of operation. The 25 or 70.7 volt input shall be fed to a matching transformer with selectable output of 1/2, 1, 2 or 4 watts. The unit shall have a minimum sensitivity



of 96 dB when measured at 1/3 octave readings between 200 and 4000 Hz at 1 meter. The speaker assembly shall be 13 inches (5.16 cm) wide, 11-3/4 inches (4.66 cm) high, 19 inches (7.54 cm) long and shall be prism shaped. The speaker assembly shall be constructed from 20 gauge steel and be finished in flat black. The weight shall be 15 pounds (6.7 kg).

Sensitivity

(Based on 1 watt per 1 m at 1/2 watt per speaker)

Sensitivity-based on 1W/1M (1/2w/speaker)					
1/3 Octave C.F.	A	B	C	D	E
125	82	80	86	86	83
160	90	89	91	92	89
200	93	95	97	98	96
250	94	101	95	100	98
315	90	95	92	97	97
400	93	92	98	95	95
500	92	90	97	93	95
630	93	91	95	91	93
800	90	91	96	94	92
1000	89	92	97	95	95
1250	89	91	95	95	92
1600	87	88	97	94	92
2000	89	94	96	100	93
2500	88	89	97	97	93
3150	86	89	95	96	93
4000	85	89	93	97	89
5000	83	85	92	95	83
6300	82	85	90	93	86
200-4K av.	90.1	92.2	95	96	93.8

Sensitivity-based on 1W/1M (1/2w/speaker)				
1/3 Octave C.F.	A	B	C	D
125	86	87	85	83
160	92	89	89	88
200	98	95	94	93
250	100	90	92	91
315	97	86	87	86
400	95	95	95	92
500	94	94	97	97
630	92	93	94	95
800	93	94	94	95
1000	95	96	96	98
1250	95	92	92	91
1600	96	94	90	91
2000	98	93	89	92
2500	97	93	88	89
3150	98	90	86	86
4000	97	89	85	87
5000	95	86	84	82
6300	94	85	83	82
8000	93	85	80	78
200-4K av.	96.1	92.5	91.4	91.7

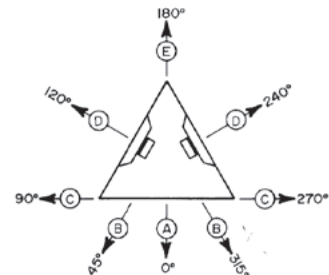


Figure 1: Horizontal Response Pattern

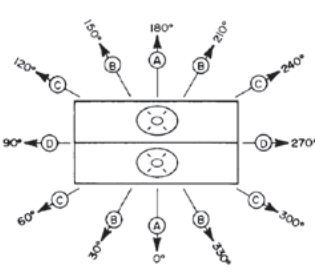
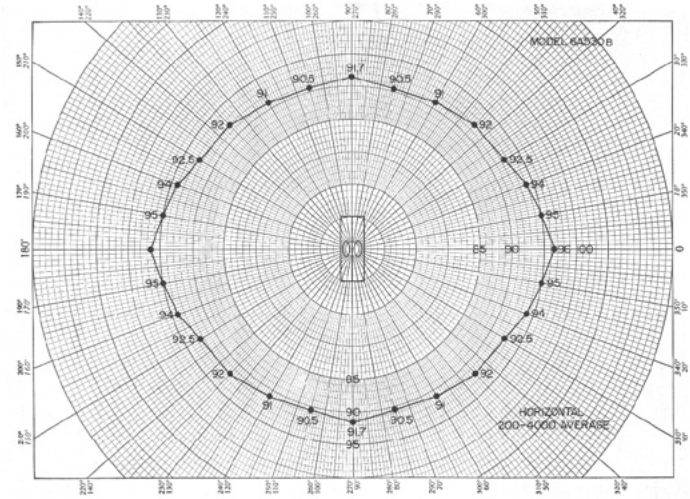
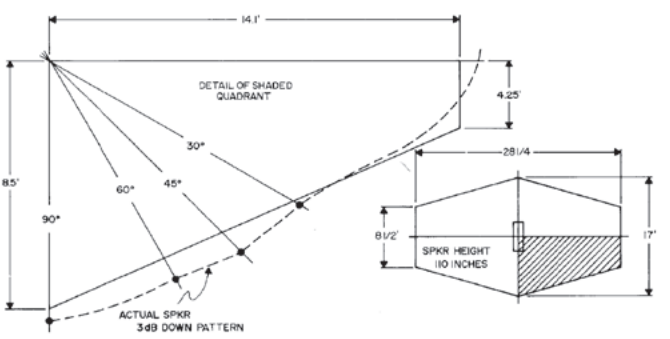


Figure 2: Vertical Response Pattern

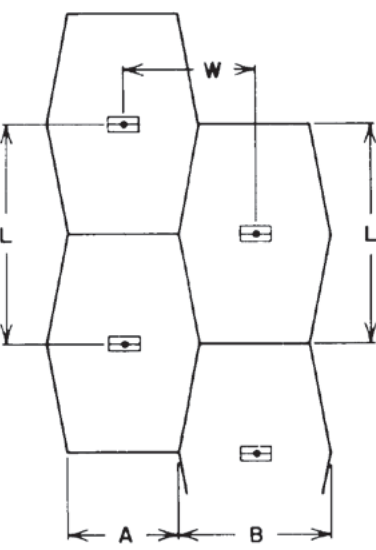
Horizontal Coverage Pattern



Pattern Configuration and Size



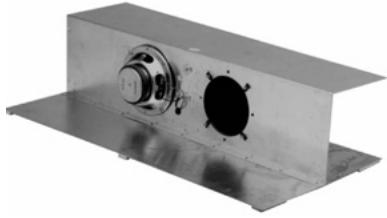
Suggested Speaker Layout



This diagram depicts an approximation of the area pattern configuration covered by 6A530B Sound Masking Speaker Assemblies. The individual speaker assemblies should be spaced so their coverage areas interlace and slightly overlap. Exact placement should be determined using the Speaker Layout Guide, Form No. 10007-J-79. The dimensions A,B,L and W and an approximate coverage area in square feet are all derived from formulas which are a part of this form.

6A603 Sound Masking Speaker Assembly

The Sound Masking Speaker Assembly shall be Dukane Model 6A603. The assembly shall consist of dual 5-inch (12.7 cm) seamless cone, high efficiency speakers. The speakers are mounted in a bidirectional configuration on a folded aluminum baffle for optimum low frequency response from a minimum installation height dimension. The assembly shall be wired for one common speaker matching transformer mounted on the baffle between the speakers.



The transformer shall be a dual voltage transformer to match 25- or 70-volt distribution lines and provide power taps of 1/2, 1, and 2 watts for the 25-volt line, and 1/2, 1, 2, and 4 watts for the 70-volt line. The speaker assembly shall be 12 inches (30.5 cm) wide by 25 inches (63.5 cm) long by 6 inches (15.2 cm) high. The folded aluminum baffle shall be finished in natural aluminum and shall weigh 4-1/2 pounds (2 kg). The assembly shall be capable of being suspended from chains on "S" hooks provided or rested on plastic foam strips on the bottom of the baffle. Any installation can be customized to any configuration to conform to local requirements.

Sensitivity

(Based on 1 watt per 1 m at 1/2 watt per speaker)

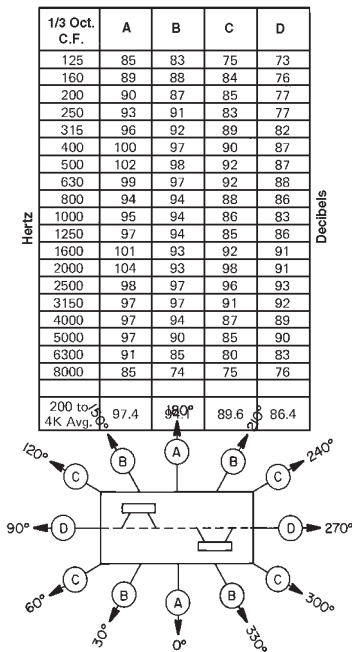


Figure 1: Horizontal Response Pattern

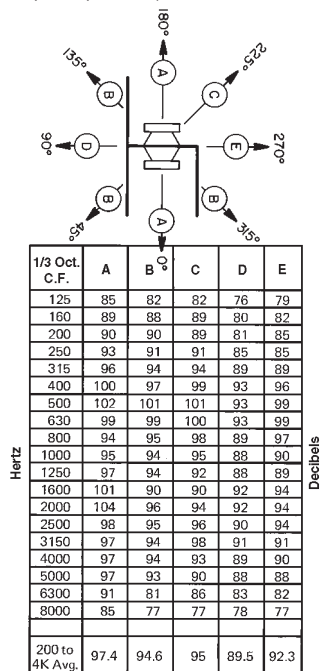
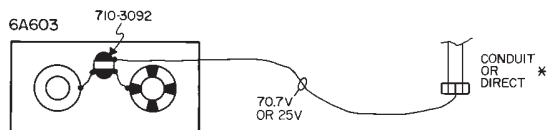
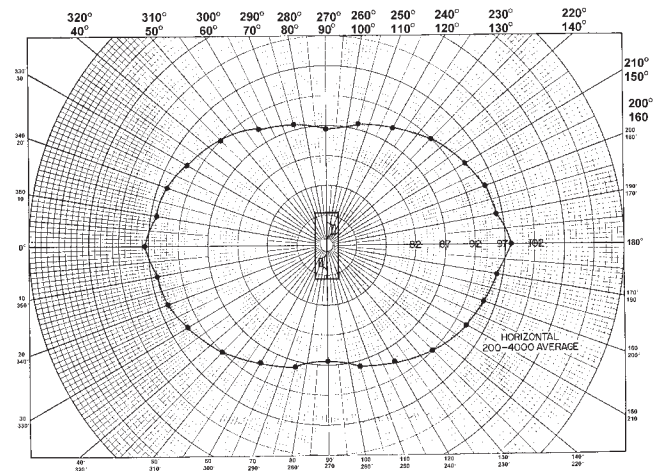


Figure 2: Vertical Response Pattern

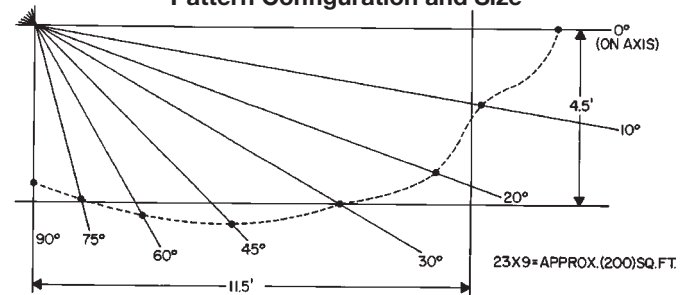
Single Transformer Mounted on Baffle Installation Configuration



Horizontal Coverage Pattern

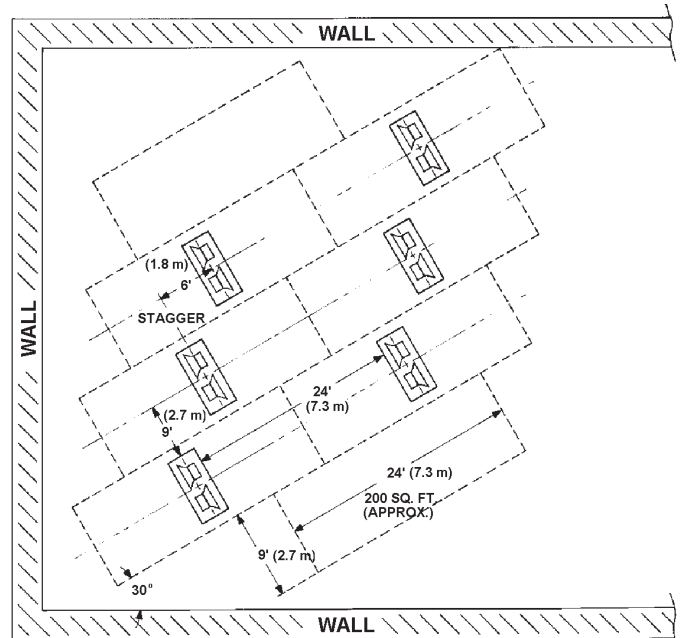


Pattern Configuration and Size



Best Unobstructed Pattern

Best unobstructed pattern configuration is obtained with baffles at uniform 30° angle to sidewalls and staggered as shown in above diagram. Each baffle assembly will provide coverage of approximately 200 square feet.



Specifications

6A603 Sound Masking Speaker Assembly

Construction	.032" (.81 mm) aluminum
Horizontal Response	See Figure 1
Response Pattern	9' by 23' (2.7 m x 7 m) rectangle (approx.) at least 200 square feet (18 sq. m)
Vertical Response	See Figure 2
Sensitivity	97.5dB at average 1/3 octave readings between 200Hz and 400Hz at 3.3" (1 m) and .5W per speaker
Mounting	"S" hooks for suspending assembly from chains; plastic foam strips on bottom of each end for resting baffle on ceiling
Finish	Natural aluminum
Dimensions	12" by 25" x 6" (30.5 cm x 63.5 cm x 15.2 cm)
Weight	4-1/2 lb (2 kg)

6A530B Background Sound Masking Speaker Assembly

Sensitivity	96 dB average 1/3 octave readings between 200 and 4000 Hz at 1 meter and .5 watts/speaker.
Construction	20 gauge steel.
Cubic Content	0.8 feet (241 mm).
Finish	Flat black.
Terminations	Pigtails.
Mounting	"S" hooks and chain (chain not supplied with unit).
Dimensions	13" (5.16 cm) wide, 11-3/4" (4.66 cm) high, 19" (7.54 cm) long. (Prism shaped.)
Weight	15 pounds (6.75 kg).

6L100 Corridor Baffle

For Speakers	Dukane 8" (20.3 cm) speakers
Finish	Brushed, satin-finished aluminum
Net Weight	2 lb (900 g)
Dimensions	4" (10.2 cm) by 4" (10.2 cm)
Backbox Required	4" (10.2 cm) by 4" (10.2 cm) standard outlet box

Flush Speaker Baffles	6A338	6A342B	6A625A	6A328
Speakers	For use with speakers 5A606 or 5A607			
Recommended Backbox Number	145-226 or 8A301			145-222 or 145-223
Finish	Solid white	22 gauge, cold- rolled steel, embossed with “Dukane,” finished with a baked-on white powdered epoxy		Flat White
Suspended Ceiling Channel				
Net Weight	7.5 oz (210 g)	20 oz (560 g)	13 oz (364 g)	36 oz (1021 g)

Speaker Baffle Assembly	6A650	6A635, 6A636 (with volume control)
Speaker Diameter	8" (20.3 cm)	8" (20.3 cm) PM type
Overall Dimensions	12-7/8" (32.7 cm) diameter, 3" (7.6 cm) deep	12-5/8" (32.1 cm) in diameter, 3-1/4" (8.3 cm) deep
Frequency Range	30 to 20,000Hz	-
Frequency Response	-	90-15,000Hz
Finish	Cold rolled 22 gauge steel, embossed with "Dukane," finished with a baked on white powdered epoxy	Cadmium plated with solid white, molded, high impact styrene baffle
Control	-	Potentiometer, 50W, wire wound
Power Rating	15W normal, 25W program	8W normal, 12 W program
Terminations	Transformer leads	
Voice Coil Impedance	8 Ohms	
Transformer Taps	25V: 1/2, 1, and 2W; 70V: 1/2, 1, 2, and 4W	
Voice Coil Diameter	1" (2.5 cm)	3/4" (2 cm)
Net Weight	2 lb, 12 oz (1.2 kg)	2 lb, 12.5 oz (1.3 kg)
Magnet Assembly	10 oz (283 g), ceramic	4.8 oz (134 g), ceramic
Associated Equipment	145-226 Backbox 677-67 Suspended Ceiling Support Channel	
Axial Sensitivity	95dB (1 m [3.3 ft]/1W)	91dB at 1 m (3.3 ft)/ 1W input

Speaker Baffle Assembly	6A634	6A630	6A633
Speaker	5A606	5A606	5A606
Baffle	6A342B	6A338	6A328
Baffle Finish	Steel coated with baked-on white powdered epoxy	Solid white, molded, high impact styrene	Steel painted flat white
Baffle Assembly Net Weight	3 lb, 8 oz (1.6 kg)	2 lb, 11 oz (1.2 kg)	4 lb, 8 oz (2 kg)
Recommended Backbox Number	145-226		145-222 or 145-223

Ordering Information

Model	Description
6A328	Flush (wall or ceiling) square speaker baffle, 12 1/2 inch square, white.
6A338	Flush (wall, ceiling) Speaker Baffle, 12-5/8 in. (32.1 cm) dia. White.
6A342B	Flush Speaker Baffle, 12-7/8 in. (32.7 cm) dia. White.
6A625A	Flush Speaker Baffle, 12-3/4 inches (32.4 cm) in diameter. White.
6A634	Speaker Baffle Assembly, Steel coated with baked-on white powdered epoxy
6A630	Speaker Baffle Assembly, Solid white, molded, high impact styrene
6A633	Speaker Baffle Assembly, Steel painted flat white
6A635	Speaker Baffle Assembly with recessed volume control
6A636	Speaker Baffle Assembly with volume control knob
6A650	Speaker Baffle Assembly
6A530B	Background Sound Masking Speaker Assembly
6A603	Sound Masking Speaker Assembly
6L100	Corridor Baffle, brushed, satin-finished aluminum. No back box required.



Detection & alarm since 1872

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